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IN THE CLAIMS:

- 1. (Cancel)
- 2. (Currently Amended) A method of controlling hand over in a mobile communication system comprising a mobile station, a plurality of base stations each communicating with the mobile station, and a base station controller controlling a the plurality of base stations, in which a received level of a perch channel signal received at a mobile station for deciding a range of a cell (or sector) is compared with a reference value, to judge timing of starting or ending hand over, said method comprising: the steps of:

each of the plurality of base stations transmitting a perch channel signal which decides a range of a cell (sector) to be covered by one base station to the mobile station:

the mobile station measuring a received level of the perch channel signal when the signal is received from the plurality of base stations, and based on a result of the measurement, transmitting information on a hand over source cell (source sector), a hand over destination candidate cell (candidate sector) and on the received level of the perch channel signal associated with these cells (sectors) to each of the base stations;

each of the base stations transmitting the information to the base station controller when the information is received from the mobile station; and

when the base station controller receives the information from the mobile station through the plurality of base stations, the controller performing the steps of:

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preparing reading a correction value in advance for each combination ef-a stored in a storage unit based on information on the hand over source cell (er source sector) and a the hand over destination candidate cell (er-destination candidate sector) of hand over contained in the information, the correction value being used to correct a reference value of the received signal level necessary for controlling the hand over:

recognizing a combination of a source cell-(or source sector) and a destination cell (or destination sector) as objects of hand over to be started or ended; correcting said the reference value using a with the correction value

prepared in advance for said-combination recognized; and

judging timing of starting or ending of said controlling the hand over using said based on the corrected reference value corrected and the received signal level of the perch channel signal contained in the information from the mobile station.

- 3. and 4. (Cancel)
- 5. (Currently Amended) A method The method of controlling hand over according to Claim 2, wherein in a mobile communication system, in which a received level of a perch channel signal received at a mobile station for deciding a range of a cell (or sector) is compared with a reference value, to judge timing of starting or ending hand over, comprising the steps of:

accumulating at least one result (success or failure) of Judging said timing using said reference value for each combination of a source soil (or source sector) and a destination cell (or destination sector) of hand over;

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correcting said reference value depending on said-accumulated result; and setting said corrected reference value as a new reference value that is used in judging timing of starting or ending hand over with respect to said combination again. the base station controller updates the correction value stored in the storage unit based on the result of hand over performed.

(Currently Amended) A method of controlling hand over according to claim 5, wherein the base station controller controls transmission power of the perch channel signal depending on the hand over performed. In a mobile communication system, in which a received level of a perch channel signal received at a mobile station for deciding a range of a cell (or sector) is compared with a reference value, to judge timing of starting or ending hand over, comprising the stops of:

accumulating at loast one result (success or failure) of judging said timing using said reference value for each combination of a source cell (or source sector) and a destination cell (or destination sector) of hand ever; and

adjusting a transmitting level of a perch channel of a base station covering a source cell (or source sector) or a destination cell (or destination sector) of a combination concerned, depending on the accumulated result.

(Currently Amended) A base station controller that judges timing of starting er-ending hand over by comparing a received level of a perch channel signal with a reference value, with said-perch channel signal being received at a mobile station and used for deciding a range of a cell (or sector), comprising: in a mobile communications system comprising a mobile station, a plurality of base stations

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which each communicate with the mobile station, and the base station controller controlling the plurality of base stations,

the base station controller comprising:

a storage unit that stores a correction value used for each combination of a source cell (or source sector) and a destination cell (or destination sector) of hand ever; correcting a reference value of a received signal level necessary for controlling hand over:

an acquiring unit for acquiring information from a mobile station, said information indicating a combination of a source cell (or source sector) and a destination cell (or dectination sector) of hand over to be started or ended with respect to said mobile station:

a correcting unit that corrects said reference value using a correction value that is stored in said storage unit correspondingly to the combination of the course cell (or source sector) and the destination cell (or sector), with said combination being recognized from the information acquired by said-acquiring unit; and

a-timing judgement unit that uses the reference value corrected by said correcting unit, to judge timing of starting or ending the hand over to be started or ended with respect to said mobile station.

an interface unit which receives information outputted from the mobile station through the plurality of base stations, the information being necessary for controlling hand over: and

a control unit which reads the correction value stored in the storage unit based on information on the hand over source cell (source sector) and on the

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hand over destination candidate cell (candidate sector) contained in the information received by the interface unit, corrects the reference value with the correction value; and controls the hand over based on the corrected reference value and the received signal level of the perch channel signal contained in the information from the mobile station.

8. (Currently Amended) A base station controller that judges timing of starting or anding hand over by comparing a received level of a perch channel-signal with a reference value, with said perch channel signal being received at a mebile station and used for deciding a range of a sell (or sector), comprising: according to Claim 7, wherein:

an acquiring unit for acquiring information from a mobile station, said Information indicating a combination of a source cell (or source sector) and a destination cell (or destination sector) of hand over to be started or ended with respect to said mobile station;

a timing judgement unit that uses said reference value to judge timing of starting or ending the hand over with respect to sald mobile station; and

a correcting unit that accumulates at least one result (success or failure) of trying starting or ending the hand over according to the timing judged by said timing judgement unit for the combination of the source cell (or source sector) and the destination cell (or destination sector) indicated by the information acquired by said acquiring unit, corrects said reference value depending on said accumulated result, and sets said corrected reference value as a new reference value that is used

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by said timing judgement unit-for judging timing of starting or ending the hand over with respect to said combination again.

the control unit updates the correction value stored in the storage unit based on hand over performed.

9. (Original) A base station controller that judges timing of starting or ending hand ever by comparing a received level of a perch channel signal with a reference value, with said perch channel signal being received at a mobile station and used for deciding a range of a cell (or sector), comprising: according to Claim 8, wherein:

the control unit controls transmitting power of the perch channel signal depending on the result of hand over performed.

an acquiring unit for acquiring information from a mobile station, said information indicating a combination of a source cell (or source sector) and a destination cell (or destination sector) of hand over to be started or ended with respect to said mobile station;

a timing judgement unit that uses said reference value to judge timing of starting or ending the hand over with respect to said mebile station; and

an adjusting unit that accumulates at least one result (success of fallure) of trying starting or ending the hand over according to the timing judged by said timing judgement unit for the combination of the source cell (or source sector) and the destination cell (or destination sector) indicated by the information acquired by said acquiring unit, and adjust a transmitting level of a perch channel signal of a base station that covers the source cell (or source sector) or the destination cell (or destination cell (or destination cell (or source sector) or the destination cell (or destination cell or source sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell (or destination cell or course sector) or the destination cell or destination cell or course sector) or the destination cell or destination cell or course sector) or the destination cell or destination cell or course sector) or the destination cell or destination cell or course sector) or the destination cell or destination cell or course sector)

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(Currently Amended) A mobile terminal that judges timing of starting or ending hand ever by comparing a received level of a perch channel signal with a reference value, with said perch channel signal being used for deciding a range of a cell (or sector), comprising: station in a mobile communication system which comprises the mobile station, a plurality of base stations which each communicate with the mobile station, and a base station controller controlling the plurality of base stations,

the mobile station comprising:

a storage unit that stores a correction value fer each combination of a source cell (or source sector) and a destination cell (or destination sector) of hand ever; used for correcting a reference value of a received signal level necessary for controlling hand over; and

a recognizing unit that recognizes a source cell (or source sector) and a destination cell (or destination sector) of hand over to be started or ended, based on received levels of perch channel signals;

a correcting unit that corrects said reference value using a correction value that is stored in said storage unit correspondingly to a combination of the seurce cell (or source sector) and the destination cell (or destination sector) recognized by said recognizing unit; and

a timing judgement unit that uses the reference value corrected by said correcting unit, to judge timing of starting or ending said hand over to be started or ended.

a control unit which measures a received level of a perch channel signal when the signal is received from the plurality of base stations, selects a candidate cell

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(candidate sector) for hand over based on the measured result, reads the correction value stored in the storage unit based on information on the hand over source cell (source sector) and on the hand over destination candidate cell (candidate sector) to correct the reference value with the correction value, and controls hand over based on the corrected reference value and the received signal level of the perch channel signal of the hand over source cell (source sector) and hand over destination cell (candidate sector),

11. (Currently Amended) The mobile terminal station according to Claim 10. further-comprising: wherein

a netifying the control unit that notifies a result (success or failure) of trying starting or ending the hand over according to the timing judged by said timing judgement unit, to a the base station with which said mobile terminal is communicating. stations under communication of the result of the hand over performed.

- 12. (New) The method of controlling hand over according to Claim 2, wherein the correction value is a tabulated correction value stored in a correction value table having a plurality of correction values arranged according to hand over source cells (source sectors) and hand over destination candidate cells (candidate sectors).
- (New) The base station controller according to Claim 7, wherein the correction value is a tabulated correction value stored in a correction value table

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having a plurality of correction values arranged according to hand over source cells (source sectors) and hand over destination candidate cells (candidate sectors).

14. (New) The mobile station according to Claim 10, wherein the correction value is a tabulated correction value stored in a correction value table having a plurality of correction values arranged according to hand over source cells (source sectors) and hand over destination candidate cells (candidate sectors).